

AMENDMENTS TO THE CLAIMS

1-62 (Canceled)

63. (New) A Piston combustion engine (1) comprising: gas intake valves and gas exhaust valves;

the gas intake valves and gas exhaust valves positioned over at least a cam shaft (3);

a cam (7) on said at least one cam shaft has a base circular outline (8) and the base circular outline has a radially extending cam portion (10);

a contoured body (6) with an auxiliary cam structure (11) having a resting position and an active position, the contoured body in the resting position constantly extends beyond the base circle outline and urges a power transfer member radially into the base circle outline, and in the active position permanent disengagement is blocked.

64. (New) The piston combustion engine (1) of claim 63 wherein the contoured body in the active position has an exhaust gas guide.

65. (New) The piston combustion engine (1) of claim 63 wherein the contoured body (6) is brought into the active position with the auxiliary cam structure (11) in a flank (9) of the cam structure (10) with a servo unit (5).

66. (New) The piston combustion engine (1) of claim 63 wherein the auxiliary cam structure (11) is positioned in proximity to the radially extending cam portion (10) in the base circular outline (8) of the cam (7).

67. (New) A Piston combustion engine (1) comprising:
gas intake valves and gas exhaust valves;
said gas intake valves and gas exhaust valves positioned over at least a cam shaft (3);
a cam (7) on said at least one cam shaft has a base circular outline (8) and the base circular outline has a radially extending cam portion (10);
a contoured body (6) is brought into an active position with an auxiliary cam structure (11) in a cam shaft (3) with a servo unit (5) applying an adjustable force.

68. (New) The piston combustion engine (1) of claim 67 wherein the servo motor (5) uses a hydraulic apparatus to generate the force.

69. (New) The piston combustion engine (1) of claim 68 wherein the servo motor (5) further comprises a spring.

70. (New) The piston combustion engine (1) of claim 67 wherein the auxiliary cam outline (11) extends in the active position above a flank (9) of the radially extending cam portion (10).

71. (New) The piston combustion engine (1) of claim 67 wherein the auxiliary cam outline (11) in a resting position extends above a flank (9) of the radially extending cam portion (10).

72. (New) A piston combustion engine (1) comprising: gas intake valves and gas exhaust valves;

said gas intake valves and gas exhaust valves positioned over at least a cam shaft (3);

a cam (7) on said at least one cam shaft has a base circular outline (8) and the base circular outline has a radially extending cam portion (10); and

a contour guide or a ventilation guide device eccentrically positioned relative to a cam shaft center (33).

73. (New) A piston combustion engine (1) comprising: gas intake valves and gas exhaust valves;

said gas intake valves and gas exhaust valves positioned over at least a cam shaft (3);

a cam (7) on said at least one cam shaft has a base circular outline (8) and the base circular outline has a radially extending cam portion (10); and

a servo unit (5) connection for bringing a contoured body (6) into an active position with a mechanical coupling element for the radial activation and straight line displacement positioning of the contoured body (6).

74. (New) The piston combustion engine (1) of claim 73 wherein the contoured body in a resting position takes the active position

75. (New) The piston combustion engine (1) of claim 73 wherein the coupling element is a coupling pin (36).

76. (New) The piston combustion engine (1) of claim 73 wherein that the cam shaft (3) has a plurality of auxiliary cam structures (11) and a plurality of mechanical couplings that are all advanced upon the activation the contoured body (6).

77. (New) The piston combustion engine (1) of claim 63 wherein operation of the contoured body regulates the operation of an internal exhaust gas guide.

78. (New) The piston combustion engine (1) of claim 63 wherein during an engine braking of the contoured body (6) operation of an exhaust valve is activated.

79. (New) A piston combustion engine comprising: gas intake valves and gas exhaust valves;

said gas intake valves and gas exhaust valves positioned over at least a cam shaft;

a cam on said at least one cam shaft has a base circular outline and the base circular outline has a radially extending cam portion;

for at least one of a plurality of valves, preferably gas exhaust valves engaging the cam, a contour body with at least an additional radially extending cam portion is provided and the contoured body is positioned in the base circular outline of the cam from a superior active position, wherein the additional contoured body is in the form of a mushroom, comprising: a part of one of the plurality of valves;

an elongated hub cam and a guide body, which are preferably cylindrical, wherein the elongated hub cam extends on at least one side in a groove transverse to the cam shaft axle in the base circle outline and/or cam profile of the cam shaft in the form of an anti-twist plate with the

guide body lying radially inside a guide, preferably in a guide bore, extends in the cam shaft and the additional contoured body is radially adjustable.

80. (New) The piston combustion engine of claim 79 wherein the contoured body is brought into an active position with a servo motor.

81. (New) The piston combustion engine of claim 79 wherein that the diameter of the cylindrical guide body is more greater than the width of the elongated hub cam.

82. (New) The piston combustion engine of claim 79 wherein the additional contour body is eccentrically arranged in a long axis of the cam shaft.

83. (New) The piston combustion engine of claim 79 wherein the additional contoured body is eccentrically arranged with respect to the cam.

84. (New) The piston combustion engine of claim 79 wherein the respective cam and/or the additional contoured body are eccentrically arranged with respect to a cam follower.

85. (New) The piston combustion engine of claim 84 wherein a spherically extending cam follower of the respective cams and/or the additional contoured body has a shape selected from the group consisting of: angular, conical, spherically, and spatially matched, for the avoidance of edge wear.

86. (New) The piston combustion engine of claim 79 wherein elongated hub cam and/or the cylindrical guide body are eccentrically arranged to long axis of the cam shaft.

87. (New) The piston combustion engine of claim 79 wherein the movement of the additional guide body is limited by a mechanical signal in the servo unit.

88. (New) The piston combustion engine of claim 79 wherein a force exists between the additional contour body and the cam shaft, preferably the force is a resilient force, such that in a deactivated condition the additional contour body is in contact with a stop in a fully extended position, for example in contact with the cam follower stop.